
The CDC Vision of Prevention of Perinatal HIV

Transmission— Martha Rogers, CDC

The vision of what CDC hopes to accomplish with these projects is one that should be molded and shaped to fit the collective vision of all participants. HIV and AIDS in children became a leading cause of death in young children under 5 years of age; the number of perinatally acquired cases peaked in 1992 when there was little that could be done for these women and children. Then in 1994, the Perinatal AIDS Clinical Trials Group (PACTG) 076 found that by giving zidovudine (AZT) to the mother during pregnancy and to the newborn, we could dramatically reduce by two-thirds the mother's likelihood of transmitting HIV to her baby. Subsequently, the number of perinatally infected children plummeted. A number of items are credited for contributing to this decline.

- National guidelines were developed and published quickly and disseminated widely by CDC, Health Resources and Services Administration (HRSA), and others.
- The Food and Drug Administration (FDA) changed the labeling of AZT to reflect the indication for prevention of perinatal HIV transmission.
- The Health Care Financing Administration (HCFA) made funding for treatment available through Medicaid and other programs.
- States passed a number of laws and regulations that helped promote the guidelines.
- Professional organizations developed best practices and encouraged their use among clinicians.
- Private foundations were supportive and provided resources.
- Congress passed legislation designed to evaluate the efforts through both the Secretary's Determination and the Institute of Medicine (IOM) report published in 1998. Later, in 1999, funding was appropriated to help states further reduce perinatal HIV transmission.

As a result of these efforts, the number of pediatric cases of AIDS declined, and AIDS dropped off the list of the top 10 causes of death in young children. These successes led us to explore how we could reduce as much as possible the number of children acquiring HIV infection and even to speculate about elimination of perinatal transmission of HIV. Achieving these goals would require highly effective interventions and implementation strategies. These points of intervention are described in the following steps.

Steps to Prevention Success

1. Pregnant women need to obtain prenatal care.
2. Providers need to recommend HIV testing for all pregnant women.
3. Once testing is recommended, the woman needs to make a decision about testing and must return for results.
4. Women who are infected must be informed of recommendations about prophylactic treatment.
5. These women must be assisted in adhering to the treatment regimen before, during, and after delivery.
6. Women must seek follow-up care for themselves and their babies and must not breast-feed their babies.

Several elements are critical for achieving the goal of prevention of perinatal HIV transmission.

- Linkages, networking, and collaboration among prevention partners must occur. The perinatal prevention program needs to be viewed in the context of the overall HIV prevention program. Maternal Child Health (MCH) programs, hepatitis B programs, and other perinatal prevention programs are potential partners.
- We need successful policies that can be modified as new information becomes available. For example, the U.S. Public Health Service (USPHS) counseling and testing guidelines are currently being revised.
- Outreach efforts must be extended to partners, communities, providers, women, and others.
- Effective and ongoing training must be provided.
- The programs must be monitored and evaluated for effectiveness. The resultant data must be used to modify the programs as needed.
- Continued research will develop better interventions and more effective implementation strategies.

CDC has formed a plan to further reduce perinatal HIV transmission. The plan was designed to work at the national level, but it can be incorporated at the state or local levels as well. The components of CDC's plan include

- **Surveillance**—expanding HIV reporting to all states
- **Research**—performing additional operational research to improve interventions and to learn how to best put them in place and to inform the prevention programs
- **Education and training**—addressing the issue of providers failing to recommend and offer HIV testing to pregnant women
- **Programs**—ensuring the success of programs being carried out by participants of this meeting, the states with the highest burden of disease and national organizations
- **Outreach**—developing partnerships and expanding community efforts
- **Evaluation**—continuously monitoring components of the interventions, their effects at national and local levels, and evaluating local programs as well
- **Policy and legal aspects**—updating prophylaxis and counseling and testing guidelines, encouraging and monitoring state laws and regulations, advocating for and supporting HIV testing of pregnant women as a Health Plan Employer Data and Information Set (HEDIS) measure, promoting model Medicaid-managed care contract language

What are some of the challenges that we're going to face as we try to further reduce perinatal transmission of HIV?

- Increasing prenatal care use, especially among substance-using women
- Making HIV screening the standard of care among all prenatal care providers
- Monitoring the emergence of antiretroviral resistance
- Addressing potential toxicities of antiretroviral drugs, a surveillance activity
- Improving adherence to very complex regimens

We have several themes to keep in mind as we develop these projects over the ensuing months and years.

- **Synergy**—We should maximize what we do in this program to apply not only to our goal, but to preventing HIV in all women, getting women into prenatal care (which helps with other diseases they might have, etc.) by creating synergy.
 - between HIV and MCH programs
 - between HIV and other perinatal interventions (e.g., hepatitis B)
 - between clinical, public health, and community-based programs
- **Collaboration and networking**—You may need to interact with people in health departments and communities that you've not previously had contact with.
- **Communication**—We need to communicate at many levels, such as websites.
- **Flexibility**—Programs need to change to fit with new scientific and evaluation information.
- **Ethics**—We need to adhere to the highest ethical standards and to ensure that our programs respect affected populations.
- **Sustainability**—We do not know how long the funds will continue, but programs need to be developed that will be sustainable beyond this grant.

With those things in mind, I wish us all well over the next couple of days. Thank you.